REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks. In this reply, claim 6 is canceled and claims 11-25 are added. Therefore, claims 1-5 and 7-25 are pending. Claims 1, 4, 7, 10 and 16 are independent.

ALLOWABLE SUBJECT MATTER

Applicants thank the Office for indicating that claims 1-3 are allowable. In this reply, claim 1 is amended merely to address informal issues as well as to remove vacuous limitations. *See numbered paragraph 13 of the Office Action.* The scope of the claim is not changed by the amendment. Thus, claims 1-3 remain allowable.

Applicants also thank the office for indicating that claims 6 and 8-9 include allowable subject matter.

§112, 2ND PARAGRAPH REJECTION

Claim 10 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claim 10 is amended to address this and other issues. Accordingly, Applicants respectfully request that the rejection of claim 10 based on § 112, second paragraph, be withdrawn.

DOUBLE PATENTING OBJECTION

Claims 8 and 9 stand objected to under 37 C.F.R. § 1.75 as allegedly being a substantial duplicate of claims 1 and 6, respectively. Claims 8 and 9 depend from independent claim 7 and claim 7 is amended in this reply. Accordingly, the scope of

claims 8 and 9 are different from the scope of claims 1 and 6. Applicants respectfully request that the objection to claims 8 and 9 be withdrawn.

§102 REJECTION - ATSUMI

Claim 10 stands rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Atsumi et al. (U.S. Patent No. 6,801,665). Applicants respectfully traverse.

For a §102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See MPEP 2131; 706.02.* Thus, if the cited reference fails to disclose one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Atsumi fails to disclose each and every claimed element. For example, independent claim 10 recites, in part "detecting an existence status of ROI set within said compressed image data based on a frequency transform coefficient of said tile for every tile." In rejecting claim 5 which recites a similar feature, the Office relies upon Figure 12 and column 23, lines 24-32 of Atsumi to allegedly disclose this feature. *See Office Action, numbered paragraph 12.* More specifically, the Office alleges that the region coordinate decoder 1202 and the ROI coefficient identification 1203 disclose the above-recited feature. A closer observation of the relied upon portions indicates otherwise.

First, Figure 12 illustrates a decoding method of an encoded bitstream coded by the encoding method as illustrated in Figure 11. In both of these methods, the concept of tiles or blocks is not present. The region of interest identification is merely decoding the coordinates of the region. There is no disclosure regarding

whether the region of interest is determined based on frequency transform coefficients.

On the other hand, Figure 13 of Atsumi does illustrate a region of interest coding where encoding and decoding are done on a block by block basis. *See column 24, lines 15-16.* In this scheme, a tag is used to identify whether the block is inside the region of interest, outside the region of interest or is a block which overlaps the boundaries of the region of interest. *See column 24, lines 21-51.* There is no disclosure that the frequency transform coefficients are used to identify whether the block belongs to one of the three categories. As such, that Atsumi does not disclose the feature of detecting an existence status of ROI set within said compressed image data based on a frequency transform coefficient of said tile for every tile as recited. Accordingly, claim 10 is distinguishable over Atsumi.

Applicants respectfully request that the rejection of claim 10 based on Atsumi be withdrawn.

§103 REJECTION - ATSUMI

Claim 7 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Atsumi. Applicants respectfully traverse.

Claim 7 recites, in part "a detector which detects an existence status of ROI set within said compressed image data based on a frequency transform coefficient of said tile for every tile." It is demonstrated above that Atsumi does not disclose this feature. Accordingly, claim 7 is distinguishable over Atsumi.

Applicants respectfully request that the rejection of claim 7 based on Atsumi be withdrawn.

§103 REJECTION - ATSUMI, KATO

Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Atsumi in view of Kato (U.S. Patent No. 6,665,446). The Office indicates that claim 6 includes allowable subject matter. In this reply, claim 4 is amended to include subject matter recited in claim 6. Therefore, claim 4 is allowable.

Claim 5 depends from claim 4 and recites further distinguishing features. Accordingly, claim 5 is also allowable.

Applicants respectfully request that the rejection of claims 4 and 5 based on Atsumi and Kato be withdrawn.

NEW CLAIMS

In this reply, claims 11-25 are added. The features of the new claims are all supported by the disclosure as originally submitted. Claims 11-15 depend from independent claims 1 and 4, directly or indirectly. Accordingly, claims 11-15 are allowable.

Independent claim 16 recites " [a] image decoding apparatus for decoding a tile of compressed image data, wherein the tile is one of a plurality of tiles of the image data, each tile being a basic unit of process in encoding or decoding process, the image decoding apparatus comprising: a dynamic range analyzer configured to analyze a dynamic range of the tile, wherein the dynamic range is based on a number of bits composing transform coefficients of the tile; a determiner configured to determine that the tile is a ROI tile composed of a only ROI set, a non-ROI tile composed of only a non-ROI set, or a ROI boundary tile composed of both the ROI

and non-ROI sets based on the dynamic range of the tile analyzed by the dynamic range analyzer; and a processor configured to reduce the transform coefficients of the tile based on whether the tile is determined to be the ROI tile, the non-ROI tile or the ROI boundary tile such that a boundary between ROI and non-ROI of the image data are visually distinguishable from each other." Applicants respectfully submit that none of the relied upon references disclose these features. Accordingly, claim 16 is allowable.

Claims 17-25 depend from claim 16 and recite further distinguishing features. Accordingly, claims 17-25 are also allowable.

Applicants respectfully request that the new claims be allowed.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact the undersigned to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

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